

GLOBAL CORAL REEF MONITORING NETWORK – REEF CHECK

Co-Sponsored by IOC-UNEP-IUCN-World Bank 1999

The Global Coral Reef Monitoring Network continued to expand during 1999 and is now currently active in all oceans with substantial funding being provided by the Department of State and NOAA of USA, the World Bank and the governments of Australia, France and the UK. Coordination is largely achieved through collaboration between IOC/UNESCO and UNEP and recognition was provided by featuring the GCRMN as a plenary address during the IOC General Assembly in Paris, June 1999.

The focus of reef monitoring activities continues to be in the Indian Ocean and Southeast Asia, where coincidentally there was massive coral bleaching and mortality in 1998 (reported in 'Status of the Coral Reefs of the World: 1998' and on the AIMS Home Page www.aims.gov.au/scr1998).

The major current activity is the preparation of a major report for GOOS, 'Status of the Coral Reefs of the World: 2000' which will provide a full global perspective on coral reef status and monitoring capacity, thereby forming the blueprint for future GCRMN training and monitoring.

The successful GCRMN South Asia Node in Sri Lanka has been refunded by DFID (UK) for a further 2nd Phase of 30 months with coordination through the IOC/UNESCO. A new Coordinator for the project has been appointed for location with IUCN in Colombo. Simultaneous with more training, India, the Maldives and Sri Lanka will prepare 6 Coral Reef Monitoring Action Plans (including 4 for India) in early 2000.

Funding by the GEF for a Node in the Western Indian Ocean island states is apparently in the final approval stages, and all governments have participated in reef monitoring training and established permanent national monitoring sites. Similarly, the Eastern African States are increasing existing monitoring and establishing more sites using funding provided through the CORDIO (a Sweden, Netherlands and the World Bank project). This project on the impacts of bleaching on reefs and peoples of the Indian Ocean was established immediately following the devastating coral bleaching in 1998 and will greatly strengthen GCRMN activities in the wider region.

The GCRMN held a training workshop in Vietnam in March, 1999 for Vietnam, China, Burma and Cambodia, using the recommended techniques. This was funded through Japan but follow up is essential to ensure that the training is consolidated and further people are trained in-country. Most other countries of Southeast Asia have strong monitoring capacity and are continuing monitoring that was initiated 15 years ago. A funding boost has been provided by the Packard Foundation which is catalysing preparation of National status of reefs reports for East Malaysia, East Indonesia, the Philippines, Palau, Federated States of Micronesia, Papua New Guinea and Solomon Islands. These reports will assist in the preparation of their Western Pacific Biodiversity Conservation project.

The formation of a major interdepartmental US Coral Reef Task Force has boosted monitoring activities in all US territories and associated states in the Pacific and Caribbean. Based on the 1998 Presidential order on coral reefs, the Task Force has planned extensive activities to conserve their reefs and constitute more Marine Protected Areas. These have been formulated and presented at approximately 6 monthly meetings held in Florida, Hawaii, St. Croix, with the next scheduled for American Samoa, May 2000. The GCRMN was invited to summarise the GCRMN program at the St. Croix meeting.

SPREP is proposing a GCRMN Node for Micronesian countries using money contributed by the US State Department. This will function out of the Palau International Coral Reef Center, which is under construction with assistance from Japan and due for completion August 2000. The International Ocean Institute of University of the South Pacific is coordinating a Node to include Kiribati, Tuvalu, Tonga and Samoa based in Fiji. Funding proposals are being prepared to go to Sida (Sweden) and the GEF. France is coordinating training and monitoring in the Southeast Pacific in association with SPREP with a major training exercise

scheduled for December, 1999, in parallel with a coral reef protected area workshop. A similar partnership between France and SPREP will hold a meeting in Noumea 22 to 24 May 2000 requesting regional countries to present National Status of Reefs reports and formulate plans for coordinated conservation of coastal resources.

The OECS (Organisation of Eastern Caribbean States) is organising a Node out of St. Lucia, similar to another to be organised based in Santa Marta, Colombia, incorporating Venezuela, Brazil, Ecuador and possibly countries of Central America. Another Node is functioning in Mexico, Belize, Honduras and Guatemala within a World Bank project, which is similar to a GEF Climate Change project for Jamaica, Bahamas and Belize. These Nodes will rely on coordination through the UNEP Regional Coordinating Unit in Jamaica and based largely on CARICOMP expertise and their database at the University of the West Indies.

The GCRMN is developing a socioeconomic manual to parallel and complement biophysical monitoring. This is being prepared by specialist writers working with NOAA (USA) and funding drawn from USA, IUCN and Japan. Production is scheduled for mid-2000, after extensive trials and training workshops to ensure suitability for all regions.

The major activity is planning for the next Status of Coral Reefs of the World: 2000 report due in late October in time for the Bali International Coral Reef Symposium. All nations are being asked to produce country reports by May, 2000 and then combine these into regional reports, which will constitute the chapters for the global report. This report will constitute the first GOOS global ecosystem report and will assist all coral reef managers, agencies and donors assess the status the reefs and capacity in order to plan for more effective conservation.

Management of the GCRMN is through two bodies: the GCRMN Management Group (IOC/UNESCO as Chair, and representatives of UNEP, IUCN, the World Bank, Australian Institute for Marine Science, ICLARM Manila and the International Coral Reef Initiative Secretariat, currently France); and the 30 member Scientific and Technical Advisory Committee (STAC) currently chaired by Professor Edgardo Gomez of the Philippines.

The GCRMN Coordinator attended the following meetings:

- Coordination meeting of GCRMN South Asia Node, Paris, 11, 12 January 1999;
- International Coral Reef Initiative Coordination and Planning Committee meetings in Paris, 15, 17 March 1999 and Guadeloupe 28,29 October 1999;
- Biological Monitoring Workshop at the National Center for Ecological Analysis and Synthesis (NCEAS) in Santa Barbara in April, 1999 as part of DIVERSITAS planning for the International Biodiversity Observation Year in 2001;
- World Bank seminar to staff in Washington on 12-APR-99, followed by a meeting with the Global Environment Facility and NOAA;
- National Coral Reef Institute meeting, Scientific Aspects of Coral Reef Assessment, Monitoring and Restoration in Ft. Lauderdale, Florida between 14 and 16 April 1999;
- IOC General Assembly in Paris, 30th June 1999 to present plenary address on the GCRMN;
- International Coral Reef Action Network planning meetings to obtain UN Foundation funds in Manila, 21 July 1999 and in Geneva, 16, 17 September, 1999;
- Convention on Biological Diversity meeting at ICLARM in Manila (11, 13-OCT-99) that prepared a statement on the recent mass bleaching and mortality, with particular reference to global climate change;
- US Coral Reef Task Force Meeting St. Croix, US Virgin Islands 1, 3 November 1999;
- UNEP-AIMS-CRC Reef Workshop on Information Management for Biodiversity protection on coral reefs, Townsville, 6, 19 December 1999.

Publications from the GCRMN:

Wilkinson C, Linden O, Cesar H, Hodgson G, Rubens J, Strong AE (1999). Ecological and socioeconomic impacts of 1998 coral mortality in the Indian Ocean: An ENSO impact and a warning of future change? *AMBIO* 28: 188-196.

Hodgson, G. (1999). A global assessment of human effects on coral reefs. *Marine Pollution Bulletin*. 38, 345-355.

Wilkinson, C. and Hodgson, G. (1999). Coral reefs and the 1997-98 mass bleaching and mortality. *Nature and Resources*, 35: 16-25 (UNESCO Paris).

Wilkinson, C. R. (1999). Global and local threats to coral reef functioning and existence: review and predictions. *Marine and Freshwater Research*, 50: 867-878.

Wilkinson, C.R. (in press). Establishing coral reef monitoring in the Hawaiian Islands: GCRMN philosophies and strategies for community-based monitoring. In: *Proc. Coral Reef Monitoring Workshop: A Tool for Management*. Dept. Land Natural Resources Management, State of Hawaii, Honolulu, June 1998.

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Additional Training Workshops for the Table (if you prepare one)

December 1998, a coral taxonomy training workshop in the Andamans following Indian Government indications that this was a key gap in their capacity. There were 2 weeks of intensive training in identification of coral genera for 9 Indian researchers.

03-17 February, 1999 a 2 week pilot exercise in was held in the Lakshadweep islands with National Institute of Oceanography. Training focussed on transferring capacity to the local community and completing a baseline survey at Kadmat Island. Results largely confirmed earlier indications of coral mortality >80%, but not all sites.

Meetings have been held to develop plans:

01 February in Chennai for Gulf of Mannar, Lakshadweep and Gulf of Kutch action plans;

05 February in Andamans;

23 February follow up meeting for Gulf of Mannar action plan;

26 February in Colombo for Sri Lanka;

26-FEB to 04-MAR, in Andamans to finalise draft action plan for in conjunction with local institutions.

The Maldives action plan will be developed on 11 to 17-MAR and will coincide with a visit of UK Deputy Prime Minister, Mr John Prescott for a monitoring demonstration.

Vietnam training workshop 1 and 13 March in Nha Trang, with 12 participants from 5 different Asian countries: 4 from Cambodia; 3 from China; 1 from Myanmar; 4 from Vietnam; and 1 from the sponsoring agent in Japan. There will be one instructor from the National Institute of Oceanography in Vietnam and two from the Australian Institute of Marine Science. The workshop will focus on monitoring methods (Reef Check and GCRMN), development of survey programs, and database operations.